# RAW SEQUENCE LISTING PATENT APPLICATION US/09/416,828

DATE: 03/10/2001 TIME: 00:45:43

INPUT SET: S36471.raw

This Raw Listing contains the General Information Section and up to the first 5 pages.

1 2		SEQUENCE LISTING ENTERED
3	(1) Ge	eneral Information:
4 5 6	(i)	APPLICANT: Ammons, William Steve et al.
7 8 9	(ii)	TITLE OF INVENTION: Method of Treating Conditions Associated with Intestinal Ischemia/Reperfusion
10 11	(iii)	NUMBER OF SEQUENCES: 2
12 13 14 15 16 17	(iv)	CORRESPONDENCE ADDRESS:  (A) ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun  (B) STREET: 6300 Sears Tower, 233 South Wacker Drive  (C) CITY: Chicago  (D) STATE: Illinois  (E) COUNTRY: United States of America  (F) ZIP: 60606-6402  MAR 1 5 7701
19 20 21 22 23 24	(v)	COMPUTER READABLE FORM:  (A) MEDIUM TYPE: Floppy disk  (B) COMPUTER: IBM PC compatible  (C) OPERATING SYSTEM: PC-DOS/MS-DOS  (D) SOFTWARE: PatentIn Release #1.0, Version #1.25
25 26 27 28 29 30	(vi)	CURRENT APPLICATION DATA:  (A) APPLICATION NUMBER: 09/416,828  (B) FILING DATE:  (C) CLASSIFICATION:
31 32 33 34	(vii)	PRIOR APPLICATION DATA:  (A) APPLICATION NUMBER: 08/756,164  (B) FILING DATE:
35 36 37 38	(viii)	ATTORNEY INFORMATION:  (A) NAME: Sharp, Jeffrey S.  (B) REGISTRATION NUMBER: 31,879  (C) REFERENCE/DOCKET NUMBER: 27129/32043
39 40 41 42 43 44 45	(ix)	TELECOMMUNICATION INFORMATION:  (A) TELEPHONE: 312/474-6300  (B) TELEFAX: 312/474-0448  (C) TELEX: 25-3856
46	(2) INFOR	MATION FOR SEQ ID NO:1:

# RAW SEQUENCE LISTING PATENT APPLICATION US/09/416,828

DATE: 03/10/2001 TIME: 00:45:43

INPUT SET: S36471.raw

													11	VFUI	SEI: S	304/1.	raw
47	,	: ) an	OTTEN	an a		ر دوست	TOMT	aa .		•							
48	( .	i) SE	~						~~								
49 50					H: 1			-	IS								
51		•	•		DEDN:												
52		•			OGY:			gre									
53		,	D, 1	OPOL	OGI.	T T 111	car										
54	/ i	i) MO	T.ECIT	ייי יש.ז	VDF.	CDM	Δ										
55	( 1	1, 140	пьсо	1112 1	IFE.	CDIV	- <b>-</b>							•			
56																	
57	(i·	x) FE	אוודע	E.													
58	(	•			KEY:	CDS									•		
59		-			ION:		. 149	1									•
60		`	_, _	•••••		J		_									
61	(i:	x) FE	ATUR	E:				•									
62	\	•			KEY:	mat	מפמ	tide									
63	•				ION:					•							
64		,	-, –														
65	(i:	x) FE	ATUR	E:													
66	,	(	A) N	AME/	KEY:	mis	c fe	atur	е								
67		,	•	•			-										
68		· (	D) O	THER	INF	ORMA	rion	: "r	BPI"								
69		,	·														
70															•		
71	(x:	i) SE	QUEN	CE D	ESCR:	IPTI	ON:	SEQ :	ID N	0:1:							
72																	
73	CAGGCC'	<b>TTGA</b>	GGTT'	TTGG	CA G	CTCT	GGAG(	G AT	G AG	A GA	G AA	C AT	G GC	C AG	G GGC		54
74								Me	t Ar	g Gl	u Ası	n Me	t Al	a Ar	g Gly		
75								-3	1 -3	0				-2	5		
76																	
77`	CCT TG	CAAC	GCG	CCG	AGA	TGG	GTG	TCC	CTG	ATG	GTG	CTC	GTC	GCC	ATA		102
78	Pro Cys	s Asn	Ala	Pro	Arg	Trp	Val	Ser	Leu	Met	Val	Leu	Val	Ala	Ile		
79			-20					-15					-10				
80												*					
81	GGC AC																150
82	Gly Th	r Ala	Val	Thr	Ala	Ala	Val	Asn	Pro	Gly		Val	Val	Arg	Ile		
83		- 5					1				5						
84																	
85	TCC CAC																198
86	Ser Gl	ı Lys	Gly	Leu		Tyr	Ala	Ser	Gln		Gly	Thr	Ala	Ala			
87	10				15					20		•			25		
88																	
89	CAG AAG																246
90	Gln Lys	s Glu	Leu	_	Arg	Ile	Lys	Ile	_	Asp	Tyr	ser	Asp		Pne		
91				30					35	•				40			
92			<b>~</b>		~~~		~~~	~	m			m- ~	. ~ ~		a		201
93	AAG ATO																294
94	Lys Ile	e Lys		Leu	GLY	гàг	GIY		Tyr	ser	Pne	ıyr		met	Asp		
95			45					50					55				
96	.ma ~~		mm-	a. ~	~~~	ac-	. ~=	m~~	~~	3.003	3.C.C	3 m~	am~	~~~	3 3 C		240
97	ATC CGT																342
98	Ile Arg	-	Pne	GIN	ьeu	Pro		ser	GIN	тте	ser		vaı	Pro	ASN		
99		60					65					70					

# RAW SEQUENCE LISTING PATENT APPLICATION US/09/416,828

DATE: 03/10/2001 TIME: 00:45:43

#### INPUT SET: S36471.raw

100																	
101	GTG	GGC	CTT	AAG	TTC	TCC	ATC	AGC	AAC	GCC	AAT	ATC	AAG	ATC	AGC	GGG	390
102	Val	Gly	Leu	Lys	Phe	Ser	Ile	Ser	Asn	Ala	Asn	Ile	Lys	Ile	Ser	Gly	
103		75					80					85					
104																	
105					_		AGA										438
106	Lys	$\mathtt{Trp}$	Lys	Ala	${ t Gln}$	Lys	Arg	Phe	Leu	Lys	Met	Ser	Gly	Asn	Phe	Asp	
107	90					95					100					105	
108																	
109		_					TCC										486
110	Leu	Ser	Ile	Glu	Gly	Met	Ser	Ile	Ser	Ala	Asp	Leu	Lys	Leu	Gly	Ser	
111					110					115					120		
112																	
113							CCC										534
114	Asn	Pro	Thr		Gly	Lys	Pro	Thr		Thr	Cys	Ser	Ser	_	Ser	Ser	
115				125					130					135			
116																	
117							GTG										582
118	His	Ile		Ser	Val	His	Val		Ile	Ser	Lys	Ser	-	Va⊥	GLY	Trp	
119			140					145					150				
120	~~~			~=~		~- ~				~~~		~~~		~~~			<b>620</b>
121							AAA										630
122	Leu		Gin	ьeu	Pne	HIS	Lys	ьys	тте	GIU	ser	_	ьeu	Arg	Asn	гÀг	
123		155					160					165					
124	ъ шС	***	300	CZ C	CITIC	шаа	CAC	7 7 7	CITIC	700	70 70 MT	mcm.	CITIA	TOO	TICC	7.7.C	678
125							GAG										6/6
126 127		ASII	ser	GIII	vai	175	Glu	цуѕ	Vai	TIIL	180	ser	vai	ser	ser	цу5 185	
127	170					1/5					100					105	
129	СТС	ממים	ССТ	ጥልጥ	ጥጥር	CAG	ACT	СТС	CCA	СΤΆ	ΔТС	ACC	ΔΔΔ	מידמ	СΔТ	ጥርጥ	726
130							Thr										720
131	100	0111		+ 3 +	190	0111		200	110	195			_,_		200	501	
132																	
133	GTG	GCT	GGA	ATC	AAC	TAT	GGT	CTG	GTG	GCA	CCT	CCA	GCA	ACC	ACG	GCT	774
134							Gly										_
135				205		-	- 4		210					215			
136																	
137	GAG	ACC	CTG	GAT	GTA	CAG	ATG	AAG	GGG	GAG	TTT	TAC	AGT	GAG	AAC	CAC	822
138	${ t Glu}$	Thr	Leu	Asp	Val	Gln	Met	Lys	Gly	Glu	Phe	Tyr	Ser	Glu	Asn	His	
139			220	_				225	_			_	230				
140																	
141	CAC	AAT	CCA	CCT	CCC	TTT	GCT	CCA	CCA	GTG	ATG	GAG	TTT	CCC	GCT	GCC	870.
142	His	Asn	Pro	Pro	Pro	Phe	Ala	Pro	Pro	Val	Met	Glu	Phe	Pro	Ala	Ala	
143		235					240					245					
144																	
145							CTG										918
146		Asp	Arg	Met	Val	_	Leu	Gly	Leu	Ser	_	Tyr	$Phe_{\cdot}$	Phe	Asn		
147	250		,			255					260	•				265	
148																	
149							GAG										966
	Ala	Gly	Leu	Val	_	Gln	Glu	Ala	Gly		Leu	Lys	Met	Thr		Arg	
151					270					275					280		
152																	

# RAW SEQUENCE LISTING PATENT APPLICATION US/09/416,828

DATE: 03/10/2001 TIME: 00:45:44

153															IN	<i>IPUT</i>	SET:	S36471.raw
ASP ASP MET ILE PTO LYS GIU SET LYS PHE ATG LEU THY THY LYS PHE 285   295	153	GAT	GAC	ATG	АТТ	CCA	AAG	GAG	TCC	AAA	TTT	CGA	CTG	ACA				
156																		
TTT GGA ACC TTC CTA CCT GAG GTG GCC AAG AAG TTT CCC AAC ATG AAG   1062			•							_		_				•		
158																		
158		TTT	GGA	ACC	TTC	CTA	CCT	GAG	GTG	GCC	AAG	AAG	TTT	CCC	AAC	ATG	AAG	1062
159	158																	
ATR CAG ATC CAT GTC TCA GCC TCC ACC CCG CCA CAC CTG TCT GTG CAG	159		•								•	•					-	
162   16   Gln   16   His Val   Ser   Ala   Ser   Thr   Pro   Pro   His   Leu   Ser   Val   Gln     163   315   320   325     164   165   CCC   ACC   GGC   CTT   ACC   TTC   CCT   GGC   GGT   GAT   GTC   CAG   GCC   TTT   GCC     166   Pro   Thr   Gly   Leu   Thr   Phe   Tyr   Pro   Ala   Val   Asp   Val   Gln   Ala   Phe   Ala     167   330   345   340   345     168   GTC   CTC   CCC   AAC   TCC   TCC   CTG   GCT   TCC   CTC   TTC   CTG   ATT   GGC   ATG   CAC     170   Val   Leu   Pro   Asn   Ser   Ser   Leu   Ala   Ser   Leu   Phe   Leu   Ile   Gly   Met   His     171   350   370   375   376     172   ACA   ACT   GGT   TCC   ATG   GAG   GTC   AGC   GCC   GAG   TCC   AAC   AGG   CTT   GTA   GGA     174   Thr   Thr   Gly   Ser   Met   Glu   Val   Ser   Ala   Glu   Ser   Asn   Arg   Leu   Val   Gly     175   365   370   375     176   GAG   CTC   AAG   CTG   GAT   AGG   CTC   CTG   GAA   CTG   AAC   AAG   CTG   AAT   ATT     178   GGC   CTC   AAG   CTG   GAT   AGG   CTG   CTG   GAA   CTG   AAG   CAC   TAC   AAT   ATT     179   380   385   390     180   GGC   CCC   TTC   CTG   GAT   ATG   CTG   CAG   GAT   ATC   ATG   AAC   TAC   ATT   GTA     181   GGC   CCC   TTC   CTG   GAT   GTG   CTG   CAG   GAT   ATC   ATG   AAC   TAC   ATT   GTA     182   Gly   Pro   Phe   Pro   Val   Glu   Leu   Leu   Gln   Asp   Tle   Met   Asn   Tyr   Tle   Val     183   395   400   405     184   CCC   ATT   CTG   CT	160																	
315   320   325   326   325   326   325   326   325   326   325   326	161	ATA	CAG	ATC	CAT	GTC	TCA	GCC	TCC	ACC	CCG	CCA	CAC	CTG	TCT	GTG	CAG	1110
164	162	Ile	Gln	Ile	His	Val	Ser	Ala	Ser	Thr	Pro	Pro	His	Leu	Ser	Val	Gln	
165	163		315					320					325					
166	164																	
167	165	CCC	ACC	GGC	CTT	ACC	TTC	TAC	CCT	GCC	GTG	GAT	GTC	CAG	GCC	TTT	GCC	1158
168	166	Pro	Thr	Gly	Leu	Thr	Phe	Tyr	Pro	Ala	Val	Asp	Val	Gln	Ala	Phe	Ala	
169	167	330		_			335					340					345	
Val Leu Pro Asn Ser Ser Leu Ala Ser Leu Phe Leu Ile Gly Met His   350   355   360   355   360   360   355   360   360   355   360   360   375   360   375   365   370   375   365   370   375   365   370   375   375   365   370   375   375   375   365   370   375   375   375   365   370   375   375   375   375   375   376	168																	
171	169	GTC	CTC	CCC	AAC	TCC	TCC	CTG	GCT	TCC	CTC	TTC	CTG	ATT	GGC	ATG	CAC	1206
172	170	Val	Leu	Pro	Asn	Ser	Ser	Leu	Ala	Ser	Leu	Phe	Leu	Ile	Gly	Met	His	
173	171					350					355					360		
The Thir Gly Ser Met Glu Val Ser Ala Glu Ser Asn Arg Leu Val Gly 365   370   375   375   375   375   376   377   375   375   377   375   375   377   375   375   377   375   375   377	172																	
175   365   370   375   375   370   375   375   370   375   375   370   375   375   370   375   375   370   375	173	ACA	ACT	GGT	TCC	ATG	GAG	GTC	AGC	GCC	GAG	TCC	AAC	AGG	CTT	GTT	GGA	1254
176	174	Thr	Thr	Gly	Ser	Met	Glu	Val	Ser	Ala	Glu	Ser	Asn	Arg	Leu	Val	Gly	
177 GAG CTC AAG CTG GAT AGG CTG CTC CTG GAA CTG AAG CAC TCA AAT ATT 178 Glu Leu Lys Leu Asp Arg Leu Leu Leu Glu Leu Lys His Ser Asn Ile 179 380 385 385 390  181 GGC CCC TTC CCG GTT GAA TTG CTG CAG GAT ATC ATG AAC TAC ATT GTA 182 Gly Pro Phe Pro Val Glu Leu Leu Gln Asp Ile Met Asn Tyr Ile Val 183 395 400 405  185 CCC ATT CTT GTG CTG CCC AGG GTT AAC GAG AAA CTA CAG AAA GGC TTC 186 Pro Ile Leu Val Leu Pro Arg Val Asn Glu Lys Leu Gln Lys Gly Phe 187 410 415 420 425  188 189 CCT CTC CCG ACG CCG GCC AGA GTC CAG GTC TAC AAC GTA GTG CTT CAG 190 Pro Leu Pro Thr Pro Ala Arg Val Gln Leu Tyr Asn Val Val Leu Gln 191 430 435 440  192 193 CCT CAC CAG AAC TTC CTG CTG TTC GGT GCA GAC GTT GTC TAT AAA 1491 194 Pro His Gln Asn Phe Leu Leu Phe Gly Ala Asp Val Val Tyr Lys 195 196 197 TGAAGGCACC AGGGGTGCCG GGGGCTGTCA GCCGCACCTG TTCCTGATGG GCTGTGGGC 1551 198  ACCGGCTGCC TTTCCCCAGG GAATCCTCTC CAGATCTTAA CCAAGAGCCC CTTGCAAACT 1611 200 201 TCTTCGACTC AGATTCAGAA ATGATCTAAA CACGAGGAAA CATTATTCAT TGGAAAAGTG 1671 202 203 CATGGTGTG ATTTTAGGGA TTATGAGCTT CTTTCAAGGG CTAAGGCTGC AGAGATATTT 1731	175				365					370					375			
178	176																	
179	177																	1302
180         181       GGC CCC TTC CCG GTT GAA TTG CTG CAG GAT ATC ATG AAC TAC ATT GTA       1350         182       Gly Pro Phe Pro Val Glu Leu Leu Gln Asp Ile Met Asn Tyr Ile Val       183         183       395       400       405         184       185       CCC ATT CTT GTG CTG CCC AGG GTT AAC GAG AAA CTA CAG AAA GGC TTC       1398         186       Pro Ile Leu Val Leu Pro Arg Val Asn Glu Lys Leu Gln Lys Gly Phe       425         188       CCT CTC CCG ACG CCG GCC AGA GTC CAG CTC TAC AAC GTA GTG CTT CAG       1446         190       Pro Leu Pro Thr Pro Ala Arg Val Gln Leu Tyr Asn Val Val Leu Gln       191         191       430       435       440         192       CCT CAC CAG AAC TTC CTG CTG TTC GGT GCA GAC GTT GTC TAT AAA       1491         193       CCT CAC CAG AAC TTC CTG CTG TTC GGT GCA GAC GTT GTC TAT AAA       1491         194       Pro His Gln Asn Phe Leu Leu Phe Gly Ala Asp Val Val Tyr Lys       195         195       445       450       455         196       TGAAGGCACC AGGGGTGCCG GGGGCTGTCA GCCGCACCTG TTCCTGATGG GCTGTGGGGC       1551         198       ACCGGCTGCC TTTCCCCAGG GAATCCTCTC CAGATCTTAA CCAAGAGCCC CTTGCAAACT       1611         200       TCTTCGACTC AGATTCAGAA ATGATCTAAA CACGAGGAAA CATTATTCAT TGGAAAAGTG       1671         202       CATGGTGTG ATTTTAGGGA	178	Glu	Leu	Lys	Leu	Asp	Arg	Leu	Leu	Leu	Glu	Leu	Lys	His	Ser	Asn	Ile	
181	179			380					385					390				
182   Gly Pro Phe Pro Val Glu Leu Leu Gln Asp Ile Met Asn Tyr Ile Val	180																	
183       395       400       405         184       185       CCC ATT CTT GTG CTG CCC AGG GTT AAC GAG AAA CTA CAG AAA GGC TTC       1398         186       Pro Ile Leu Val Leu Pro Arg Val Asn Glu Lys Leu Gln Lys Gly Phe       410       415       420       425         188       CCT CTC CCG ACG CCG GCC AGA GTC CAG CTC TAC AAC GTA GTG CTT CAG       1446         190       Pro Leu Pro Thr Pro Ala Arg Val Gln Leu Tyr Asn Val Val Leu Gln       191       430       435       440         192       CCT CAC CAG AAC TTC CTG CTG TTC GGT GCA GAC GTT GTC TAT AAA       1491         194       Pro His Gln Asn Phe Leu Leu Phe Gly Ala Asp Val Val Tyr Lys       195       455         196       TGAAGGCACC AGGGGTGCCG GGGGCTGTCA GCCGCACCTG TTCCTGATGG GCTGTGGGGC       1551         198       ACCGGCTGCC TTTCCCCAGG GAATCCTCTC CAGATCTTAA CCAAGAGCCC CTTGCAAACT       1611         200       TCTTCGACTC AGATTCAGAA ATGATCTAAA CACGAGGAAA CATTATTCAT TGGAAAAGTG       1671         202       CATGGTGTGT ATTTTAGGGA TTATGAGCTT CTTTCAAGGG CTAAGGCTGC AGAGATATTT       1731																		1350
184  185	182	Gly		'Phe	Pro	Val	Glu	Leu	Leu	Gln	Asp	Ile		Asn	Tyr	Ile	Val	
185			395					400					405					
Pro Ile Leu Val Leu Pro Arg Val Asn Glu Lys Leu Gln Lys Gly Phe 187 410 415 420 425  188  189 CCT CTC CCG ACG CCG GCC AGA GTC CAG CTC TAC AAC GTA GTG CTT CAG 190 Pro Leu Pro Thr Pro Ala Arg Val Gln Leu Tyr Asn Val Val Leu Gln 191 430 435 440  192  193 CCT CAC CAG AAC TTC CTG CTG TTC GGT GCA GAC GTT GTC TAT AAA 1491  194 Pro His Gln Asn Phe Leu Leu Phe Gly Ala Asp Val Val Tyr Lys 195 445 450 455  196  197 TGAAGGCACC AGGGGTGCCG GGGGCTGTCA GCCGCACCTG TTCCTGATGG GCTGTGGGGC 1551  198  199 ACCGGCTGCC TTTCCCCAGG GAATCCTCTC CAGATCTTAA CCAAGAGCCC CTTGCAAACT 1611 200  201 TCTTCGACTC AGATTCAGAA ATGATCTAAA CACGAGGAAA CATTATTCAT TGGAAAAGTG 1671 202  203 CATGGTGTGT ATTTTAGGGA TTATGAGCTT CTTTCAAGGG CTAAGGCTGC AGAGATATTT 1731																		
187 410 415 420 425  188  189 CCT CTC CCG ACG CCG GCC AGA GTC CAG CTC TAC AAC GTA GTG CTT CAG 190 Pro Leu Pro Thr Pro Ala Arg Val Gln Leu Tyr Asn Val Val Leu Gln 191 430 435 440  192  193 CCT CAC CAG AAC TTC CTG CTG TTC GGT GCA GAC GTT GTC TAT AAA 1491 194 Pro His Gln Asn Phe Leu Leu Phe Gly Ala Asp Val Val Tyr Lys 195 445 450 455  196  197 TGAAGGCACC AGGGGTGCCG GGGGCTGTCA GCCGCACCTG TTCCTGATGG GCTGTGGGGC 1551 198 ACCGGCTGCC TTTCCCCAGG GAATCCTCTC CAGATCTTAA CCAAGAGCCC CTTGCAAACT 1611 200  201 TCTTCGACTC AGATTCAGAA ATGATCŢAAA CACGAGGAAA CATTATTCAT TGGAAAAGTG 1671 202  203 CATGGTGTGT ATTTTAGGGA TTATGAGCTT CTTTCAAGGG CTAAGGCTGC AGAGATATTT 1731																		1398
188  189 CCT CTC CCG ACG CCG GCC AGA GTC CAG CTC TAC AAC GTA GTG CTT CAG  190 Pro Leu Pro Thr Pro Ala Arg Val Gln Leu Tyr Asn Val Val Leu Gln  191 430 435 440  192  193 CCT CAC CAG AAC TTC CTG CTG TTC GGT GCA GAC GTT GTC TAT AAA 1491  194 Pro His Gln Asn Phe Leu Leu Phe Gly Ala Asp Val Val Tyr Lys  195 445 450 455  196  197 TGAAGGCACC AGGGGTGCCG GGGGCTGTCA GCCGCACCTG TTCCTGATGG GCTGTGGGGC 1551  198  199 ACCGGCTGCC TTTCCCCAGG GAATCCTCTC CAGATCTTAA CCAAGAGCCC CTTGCAAACT 1611  200  201 TCTTCGACTC AGATTCAGAA ATGATCTAAA CACGAGGAAA CATTATTCAT TGGAAAAGTG 1671  202  203 CATGGTGTGT ATTTTAGGGA TTATGAGCTT CTTTCAAGGG CTAAGGCTGC AGAGATATTT 1731			Ile	Leu	Val	Leu		Arg	Val	Asn	Glu		Leu	GIn	Lys	GIY		
189 CCT CTC CCG ACG CCG GCC AGA GTC CAG CTC TAC AAC GTA GTG CTT CAG 190 Pro Leu Pro Thr Pro Ala Arg Val Gln Leu Tyr Asn Val Val Leu Gln 191 430 435 440  192 193 CCT CAC CAG AAC TTC CTG CTG TTC GGT GCA GAC GTT GTC TAT AAA 1491 194 Pro His Gln Asn Phe Leu Leu Phe Gly Ala Asp Val Val Tyr Lys 195 445 450 455  196 197 TGAAGGCACC AGGGGTGCCG GGGGCTGTCA GCCGCACCTG TTCCTGATGG GCTGTGGGGC 1551 198 199 ACCGGCTGCC TTTCCCCAGG GAATCCTCTC CAGATCTTAA CCAAGAGCCC CTTGCAAACT 1611 200 201 TCTTCGACTC AGATTCAGAA ATGATCTAAA CACGAGGAAA CATTATTCAT TGGAAAAGTG 1671 202 203 CATGGTGTGT ATTTTAGGGA TTATGAGCTT CTTTCAAGGG CTAAGGCTGC AGAGATATTT 1731		410					415					420					425	
Pro Leu Pro Thr Pro Ala Arg Val Gln Leu Tyr Asn Val Val Leu Gln 430 435 440  192  193 CCT CAC CAG AAC TTC CTG CTG TTC GGT GCA GAC GTT GTC TAT AAA 1491  194 Pro His Gln Asn Phe Leu Leu Phe Gly Ala Asp Val Val Tyr Lys 195 445 450 455  196  197 TGAAGGCACC AGGGGTGCCG GGGGCTGTCA GCCGCACCTG TTCCTGATGG GCTGTGGGGC 1551  198  199 ACCGGCTGCC TTTCCCCAGG GAATCCTCTC CAGATCTTAA CCAAGAGCCC CTTGCAAACT 1611 200  201 TCTTCGACTC AGATTCAGAA ATGATCTAAA CACGAGGAAA CATTATTCAT TGGAAAAGTG 1671 202 203 CATGGTGTGT ATTTTAGGGA TTATGAGCTT CTTTCAAGGG CTAAGGCTGC AGAGATATTT 1731						~~~			~-~	~~~				~	~=~	-	~~~	3 4 4 6
191 430 435 440  192  193 CCT CAC CAG AAC TTC CTG CTG TTC GGT GCA GAC GTT GTC TAT AAA 1491  194 Pro His Gln Asn Phe Leu Leu Phe Gly Ala Asp Val Val Tyr Lys  195 445 450 455  196  197 TGAAGGCACC AGGGGTGCCG GGGGCTGTCA GCCGCACCTG TTCCTGATGG GCTGTGGGGC 1551  198  199 ACCGGCTGCC TTTCCCCAGG GAATCCTCTC CAGATCTTAA CCAAGAGCCC CTTGCAAACT 1611  200  201 TCTTCGACTC AGATTCAGAA ATGATCŢAAA CACGAGGAAA CATTATTCAT TGGAAAAGTG 1671  202  203 CATGGTGTGT ATTTTAGGGA TTATGAGCTT CTTTCAAGGG CTAAGGCTGC AGAGATATTT 1731																		1446
192 193 CCT CAC CAG AAC TTC CTG CTG TTC GGT GCA GAC GTT GTC TAT AAA 194 Pro His Gln Asn Phe Leu Leu Phe Gly Ala Asp Val Val Tyr Lys 195 445 450 455 196 197 TGAAGGCACC AGGGGTGCCG GGGGCTGTCA GCCGCACCTG TTCCTGATGG GCTGTGGGGC 1551 198 199 ACCGGCTGCC TTTCCCCAGG GAATCCTCTC CAGATCTTAA CCAAGAGCCC CTTGCAAACT 1611 200 201 TCTTCGACTC AGATTCAGAA ATGATCŢAAA CACGAGGAAA CATTATTCAT TGGAAAAGTG 1671 202 203 CATGGTGTGT ATTTTAGGGA TTATGAGCTT CTTTCAAGGG CTAAGGCTGC AGAGATATTT 1731		Pro	Leu	Pro	Tnr		Ата	Arg	Val	Gin		Tyr	Asn	vai	vaı		GIN	
193 CCT CAC CAG AAC TTC CTG CTG TTC GGT GCA GAC GTT GTC TAT AAA 1491 194 Pro His Gln Asn Phe Leu Leu Phe Gly Ala Asp Val Val Tyr Lys 195 445 450 455 196 197 TGAAGGCACC AGGGGTGCCG GGGGCTGTCA GCCGCACCTG TTCCTGATGG GCTGTGGGGC 1551 198 199 ACCGGCTGCC TTTCCCCAGG GAATCCTCTC CAGATCTTAA CCAAGAGCCC CTTGCAAACT 1611 200 201 TCTTCGACTC AGATTCAGAA ATGATCŢAAA CACGAGGAAA CATTATTCAT TGGAAAAGTG 1671 202 203 CATGGTGTGT ATTTTAGGGA TTATGAGCTT CTTTCAAGGG CTAAGGCTGC AGAGATATTT 1731						430					435					440		
Pro His Gln Asn Phe Leu Leu Phe Gly Ala Asp Val Val Tyr Lys 195 445 450 455  196 197 TGAAGGCACC AGGGGTGCCG GGGGCTGTCA GCCGCACCTG TTCCTGATGG GCTGTGGGGC 1551 198 199 ACCGGCTGCC TTTCCCCCAGG GAATCCTCTC CAGATCTTAA CCAAGAGCCC CTTGCAAACT 1611 200 201 TCTTCGACTC AGATTCAGAA ATGATCŢAAA CACGAGGAAA CATTATTCAT TGGAAAAGTG 1671 202 203 CATGGTGTGT ATTTTAGGGA TTATGAGCTT CTTTCAAGGG CTAAGGCTGC AGAGATATTT 1731 204		~~=	~- ~	~~~			a=a	ama.		~~m	~~~	~~~	C TTTT	ama	<b></b>	777		1401
195 445 450 455  196  197 TGAAGGCACC AGGGGTGCCG GGGGCTGTCA GCCGCACCTG TTCCTGATGG GCTGTGGGGC 1551  198  199 ACCGGCTGCC TTTCCCCAGG GAATCCTCTC CAGATCTTAA CCAAGAGCCC CTTGCAAACT 1611  200  201 TCTTCGACTC AGATTCAGAA ATGATCŢAAA CACGAGGAAA CATTATTCAT TGGAAAAGTG 1671  202  203 CATGGTGTGT ATTTTAGGGA TTATGAGCTT CTTTCAAGGG CTAAGGCTGC AGAGATATTT 1731  204																		1491
196 197 TGAAGGCACC AGGGGTGCCG GGGGCTGTCA GCCGCACCTG TTCCTGATGG GCTGTGGGGC 1551 198 199 ACCGGCTGCC TTTCCCCAGG GAATCCTCTC CAGATCTTAA CCAAGAGCCC CTTGCAAACT 1611 200 201 TCTTCGACTC AGATTCAGAA ATGATCŢAAA CACGAGGAAA CATTATTCAT TGGAAAAGTG 1671 202 203 CATGGTGTGT ATTTTAGGGA TTATGAGCTT CTTTCAAGGG CTAAGGCTGC AGAGATATTT 1731		Pro	HIS	GIN		Pne	ьeu	Leu	Pne	_	Ala	Asp	vaı	vaı	_	ьys		
197 TGAAGGCACC AGGGGTGCCG GGGGCTGTCA GCCGCACCTG TTCCTGATGG GCTGTGGGGC 1551 198 199 ACCGGCTGCC TTTCCCCAGG GAATCCTCTC CAGATCTTAA CCAAGAGCCC CTTGCAAACT 1611 200 201 TCTTCGACTC AGATTCAGAA ATGATCŢAAA CACGAGGAAA CATTATTCAT TGGAAAAGTG 1671 202 203 CATGGTGTGT ATTTTAGGGA TTATGAGCTT CTTTCAAGGG CTAAGGCTGC AGAGATATTT 1731 204					445					450					455			
198 199 ACCGGCTGCC TTTCCCCAGG GAATCCTCTC CAGATCTTAA CCAAGAGCCC CTTGCAAACT 1611 200 201 TCTTCGACTC AGATTCAGAA ATGATCŢAAA CACGAGGAAA CATTATTCAT TGGAAAAGTG 1671 202 203 CATGGTGTGT ATTTTAGGGA TTATGAGCTT CTTTCAAGGG CTAAGGCTGC AGAGATATTT 1731			. ~ ~ ~ ~									ama	mmaa	100 A D		aman		1551
199 ACCGGCTGCC TTTCCCCAGG GAATCCTCTC CAGATCTTAA CCAAGAGCCC CTTGCAAACT 1611 200 201 TCTTCGACTC AGATTCAGAA ATGATCŢAAA CACGAGGAAA CATTATTCAT TGGAAAAGTG 1671 202 203 CATGGTGTGT ATTTTAGGGA TTATGAGCTT CTTTCAAGGG CTAAGGCTGC AGAGATATTT 1731 204		TGAA	AGGCA	ACC A	AGGGG	TGCC	ان کان	الكافافة	.'GTCF	A GCC	GCAC	CTG	TTCC	TGA	النان (	iCTGT	الالالالالالا	C 1551
200 201 TCTTCGACTC AGATTCAGAA ATGATCŢAAA CACGAGGAAA CATTATTCAT TGGAAAAGTG 1671 202 203 CATGGTGTGT ATTTTAGGGA TTATGAGCTT CTTTCAAGGG CTAAGGCTGC AGAGATATTT 1731 204	-	3 000	aama	100 1	mmaa	1001		N III CO	mama		1 N M (2)	ת תחח	0077	0700	700 C	ammer e	12 2 2 C	m 1611
201 TCTTCGACTC AGATTCAGAA ATGATCŢAAA CACGAGGAAA CATTATTCAT TGGAAAAGTG 1671 202 203 CATGGTGTGT ATTTTAGGGA TTATGAGCTT CTTTCAAGGG CTAAGGCTGC AGAGATATTT 1731 204		ACCC	GCT(	<del>-</del> CC 1	LITCO	CCAC	G GF	WICC	LICIC	. CAG	AICI	IAA	CCAL	)DHDL	(	-i rec	JAMM.	1011
202 203 CATGGTGTGT ATTTTAGGGA TTATGAGCTT CTTTCAAGGG CTAAGGCTGC AGAGATATTT 1731 204		m/ama	1007	יי יישורי	(	יסגסי	\ 7\	ירי א חיי	יי א <b>ער</b> וור		ים א מים	י א <b>א</b> י	Cama	יא נוויתו עי	יי ייטער	יי <i>א</i> בייביים	ል አ ፖ ጦ	nc 1 <i>67</i> 1
203 CATGGTGTGT ATTTTAGGGA TTATGAGCTT CTTTCAAGGG CTAAGGCTGC AGAGATATTT 1731 204		TCTT	.CGAC	TC F	4GATT	CAGA	M WI	.GATC	' î WW	ı CAC	JUHU.	HAA	CATI	ATT	AI I	GGAF	ame I	G 16/1
204		ריא יייר	יכיחיכים	י ייייביי	/ փփփա	יאכככ	ייי אַיַ	יביתמי	עריתים	י כיתיים	יתר'א זי	עמפים	ርጥል ፣	الالالالات	יכר ז	CACT	ייי עיי	rr 1731
		CATO	70107	.GI F	7111	שטטה	יי דו	ALGF	11001	. (11	LCM	DDDs	CIMP	3.GGC 1	.GC F	JUNUF		- 1/31
TO COLONIOUM ICUIDITION MITORIANON MOUNTITO MITORICIT CUIDIBLEM TAIL	205	CCTC	CAGO	AA T	CGTC	TTTC	LA AL	TGTA	ACCA	AGA	LAATI	TCC	ATTT	GTGC	TT C	ATGA	AAAA	A 1791

# RAW SEQUENCE LISTING PATENT APPLICATION US/09/416,828

DATE: 03/10/2001 TIME: 00:45:44

INPUT SET: S36471.raw

														#1	VFUI	SEI:	3304/1.raw
206 207	AAC'	TTCT	GGT	TTTT'	TTCA'	TG T	G										1813
208																	
209	(0)	T. 3. T. T.	OD843	mron.	TO D	ano	TD I	TO . 3									
210 211	(2)	INF	ORMA	TION	FOR	SEQ	ו עד	NO:2	•								
212			(i)	SEQU	ENCE	CHA	RACT	ERIS'	TICS	:							
213				-	) LE						s						
214				(B		PE:											
215				(D	) TO	POLO	GY:	line	ar								
216																	
217		( .	ii) 1	MOLE	CULE	TYP:	E: p:	rote	in								
218																	
219		(:	xi)	SEQU	ENCE	DES	CRIP	rion	: SE	Q ID	NO:	2:					
220																	
221		_	Glu	Asn	Met	Ala	Arg	Gly	Pro	Cys	Asn		Pro	Arg	Trp	Val	
222	-31	-30					-25					-20					
223						_										<b>_</b>	
224		Leu	Met	Val	Leu		Ala	Ile	Gly	Thr		Val	Thr	Ala	Ala		
225	-15					-10					-5					1	
226			~1	••- 7	**- 7	**- 7		-1-	<b>a</b>	<b>~1</b>	•	<b>a</b> 1	<b>7</b>	<b>3</b>	m	77-	
227	Asn	Pro	GIY		vaı	vaı	Arg	тте		GIN	ьys	GIY	ьeu		Tyr	Ala	•
228 229				5					10					15			
230	602		Cln	Gly	Thr	71-	777	T 011	Cln	Tuc	C111	Lou	Tarc	Λ ~~	Tla	Lare	
231	ser	GIII	20	Gry	1111	Ala	Ата	25	GIII	пуъ	GIU	пеп	ЗO	ALG	116	цур	
232			20					23					50				
233·	Tle	Pro	Δsn	Tvr	Ser	Asn	Ser	Phe	Lvs	Tle	Lvs	His	Len	Glv	Lvs	Gly	
234		35	1100	- 1 -	201		40		_,_			45		0-1	-1-	- <i>I</i> ,	
235		,															
236	His	Tyr	Ser	Phe	Tyr	Ser	Met	Asp	Ile	Arq	Glu	Phe	Gln	Leu	Pro	Ser	
237	50	•			-	55		-		J	60					65	
238																	
239	Ser	Gln	Ile	Ser	Met	Val	Pro	Asn	Val	Gly	Leu	Lys	Phe	Ser	Ile	Ser	
240					70					75					80		
241																	
242	Asn	Ala	Asn	Ile	Lys	Ile	Ser	Gly		$\mathtt{Trp}$	Lys	Ala	Gln	_	Arg	Phe	
243				85					90					95			
244					<b></b>		- •	_	_	_					_		
245	Leu	Lys		Ser	GLY	Asn	Phe	_	Leu	Ser	IIe	GIu	_	Met	ser	ΙΙĘ	
246	•		100					105					110				
247	0	31-	3	T	T	T	<b>a</b> 1		7	D	mla sa	0	a1	T	Dwo	mb so	
248	ser		Asp	Leu	гуѕ	ьeu	-	ser	ASII	Pro	THE		GIY	гуѕ	PIO	IIII	
249 250		115					120					125					
250 251	Tlo	Thr	Cve	Ser	Ser	Cve	Ser	Ser	иie	Tle	Δen	Ser	Va 1	Hic	Va 1	Hie	
251	130	1111	Cys	JULI	DEL	135	DGI	nc r	1113	11G	140	JUL	VUL		val	145	
253	-50										_ 10						
254	Ile	Ser	Lvs	Ser	Lys	Val	Glv	Trp	Leu	Ile	Gln	Leu	Phe	His	Lys	Lys	
255			4 -		150		4	- T-		155			-		160	• -	
256																	
257	Ile	Glu	Ser	Ala	Leu	Arg	Asn	Lys	Met	Asn	Ser	Gln	Val	Cys	Glu	Lys	
258				165					170					175			

### SEQUENCE VERIFICATION REPORT PATENT APPLICATION US/09/416,828

DATE: 03/10/2001 TIME: 00:45:44

INPUT SET: S36471.raw

Line

Error

. Original Text

### SEQUENCE CORRECTION REPORT PATENT APPLICATION US/09/416,828

DATE: 03/10/2001 TIME: 00:45:44

INPUT SET: S36471.raw

Line

Original Text

Corrected Text

35

(viii) ATTORNEY INFORMATION:

(viii) ATTORNEY/AGENT INFORMATION: